S. 1957

To authorize the Secretary of the Interior to cooperate with the States on the border with Mexico and other appropriate entities in conducting a hydrogeologic characterization, mapping, and modeling program for priority transboundary aquifers, and for other purposes.

IN THE SENATE OF THE UNITED STATES

NOVEMBER 25, 2003

Mr. BINGAMAN introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

A BILL

To authorize the Secretary of the Interior to cooperate with the States on the border with Mexico and other appropriate entities in conducting a hydrogeologic characterization, mapping, and modeling program for priority transboundary aquifers, and for other purposes.

- 1 Be it enacted by the Senate and House of Representa-
- 2 tives of the United States of America in Congress assembled,
- 3 SECTION 1. SHORT TITLE.
- 4 This Act may be cited as the "United States-Mexico
- 5 Transboundary Aquifer Assessment Act".
- 6 SEC. 2. FINDINGS AND PURPOSE.
- 7 (a) FINDINGS.—Congress finds that—

- 1 (1) rapid population growth in the United 2 States-Mexico border region over the last decade has 3 placed major strains on limited water supplies in the 4 region;
 - (2) water quantity and quality issues are likely to be the determining and limiting factors affecting future economic development, population growth, and human health in the border region;
 - (3) increasing use of groundwater resources in the border region by municipal and other water users has raised serious questions concerning the long-term availability of the water supply;
 - (4) cooperation between the United States and Mexico in assessing and understanding transboundary aquifers is necessary for the successful management of shared groundwater resources by State and local authorities in the United States and appropriate authorities in Mexico, including management that avoids conflict between the United States and Mexico;
 - (5) while there have been some studies of binational groundwater resources along the United States-Mexico border, additional data and analyses are needed to develop an accurate understanding of

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1	the long-term availability of useable water supplies
2	from transboundary aquifers; and
3	(6) the Border States—
4	(A) are primarily responsible for the man-
5	agement and allocation of groundwater re-
6	sources within the respective boundaries of the
7	Border States; and
8	(B) should have a cooperative role in the
9	analysis and characterization of transboundary
10	aquifers.
11	(b) Purpose.—The purpose of this Act is to direct
12	the Secretary of the Interior to establish a United States-
13	Mexico transboundary aquifer assessment program to—
14	(1) systematically assess priority transboundary
15	aquifers; and
16	(2) provide the scientific foundation necessary
17	for State and local officials to address pressing
18	water resource challenges in the United States-Mex-
19	ico border region.
20	SEC. 3. DEFINITIONS.
21	In this Act:
22	(1) AQUIFER.—The term "aquifer" means a
23	subsurface water-bearing geologic formation from
24	which significant quantities of water may be ex-
25	tracted.

1	(2) Border State.—The term "Border State"
2	means each of the States of Arizona, California,
3	New Mexico, and Texas.
4	(3) Indian tribe.—The term "Indian tribe"
5	means an Indian tribe, band, nation, or other orga-
6	nized group or community—
7	(A) that is recognized as eligible for the
8	special programs and services provided by the
9	United States to Indians because of their status
10	as Indians; and
11	(B) the reservation of which includes a
12	transboundary aquifer within the exterior
13	boundaries of the reservation.
14	(4) Priority transboundary aquifer.—The
15	term "priority transboundary aquifer" means a
16	transboundary aquifer that has been designated for
17	study and analysis under the program.
18	(5) Program.—The term "program" means
19	the United States-Mexico transboundary aquifer as-
20	sessment program established under section 4(a).
21	(6) Reservation.—The term "reservation"
22	means land that has been set aside or that has been
23	acknowledged as having been set aside by the United
24	States for the use of an Indian tribe, the exterior

boundaries of which are more particularly defined in

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1	a final tribal treaty, agreement, executive order,
2	Federal statute, secretarial order, or judicial deter-
3	mination.
4	(7) Secretary.—The term "Secretary" means
5	the Secretary of the Interior, acting through the Di-
6	rector of the United States Geological Survey.
7	(8) Transboundary aquifer.—The term
8	"transboundary aquifer" means an aquifer that
9	underlies the boundary between the United States
10	and Mexico.
11	(9) Tri-regional planning group.—The
12	term "Tri-Regional Planning Group" means the bi-
13	national planning group comprised of—
14	(A) the Junta Municipal de Aqua y
15	Saneamiento de Ciudad Juarez;
16	(B) the El Paso Water Utilities Public
17	Service Board; and
18	(C) the Lower Rio Grande Water Users
19	Organization.
20	(10) Water resources research insti-
21	TUTES.—The term "water resources research insti-
22	tutes" means the institutes within the Border States
23	established under section 104 of the Water Re-

sources Research Act of 1984 (42 U.S.C. 10303).

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1 SEC. 4. ESTABLISHMENT OF PROGRAM.

2	(a) In General.—The Secretary, in consultation
3	and cooperation with the Border States, the Water Re-
4	sources Research Institutes, Sandia National Labora-
5	tories, and other appropriate entities in the United States
6	and Mexico, shall carry out the United States-Mexico
7	transboundary aquifer assessment program to charac-
8	terize, map, and model transboundary groundwater re-
9	sources along the United States-Mexico border at a level
10	of detail determined to be appropriate for the particular
11	aquifer.
12	(b) Objectives.—The objectives of the program are
13	to—
14	(1) develop and implement an integrated sci-
15	entific approach to assess transboundary ground-
16	water resources, including—
17	(A)(i) identifying fresh and saline
18	transboundary aquifers; and
19	(ii) prioritizing the transboundary aquifers
20	for further analysis by assessing—
21	(I) the proximity of the transboundary
22	aquifer to areas of high population density;
23	(II) the extent to which the
24	transboundary aquifer is used; and
25	(III) the susceptibility of the
26	transboundary aquifer to contamination;

1	(B) evaluating all available data and publi-
2	cations as part of the development of study
3	plans for each priority transboundary aquifer;
4	(C) creating a geographic information sys-
5	tem database to characterize the spatial and
6	temporal aspects of each priority transboundary
7	aquifer; and
8	(D) using field studies, including support
9	for and expansion of ongoing monitoring and
10	metering efforts, to develop any additional data
11	that are needed to define aquifer characteristics
12	to the extent necessary to enable the develop-
13	ment of groundwater flow models to assess sus-
14	tainable water yields for each priority
15	transboundary aquifer;
16	(2) expand existing agreements, as appropriate,
17	between the United States Geological Survey, the
18	Border States, the Water Resources Research Insti-
19	tutes, and appropriate authorities in the United
20	States and Mexico, to—
21	(A) conduct joint scientific investigations;
22	(B) archive and share relevant data; and
23	(C) carry out any other activities con-
24	sistent with the program; and

- 1 (3) produce scientific products for each priority
- 2 transboundary aquifer to provide the scientific infor-
- 3 mation needed by water managers and natural re-
- 4 source agencies on both sides of the United States-
- 5 Mexico border to effectively accomplish the missions
- 6 of the managers and agencies.
- 7 (c) Designation of Certain Aquifers.—For pur-
- 8 poses of the program, the Secretary shall designate the
- 9 Hueco Bolson and Mesilla aquifers underlying parts of
- 10 Texas, New Mexico, and Mexico as priority transboundary
- 11 aquifers.
- 12 (d) Cooperation With Mexico.—To ensure a com-
- 13 prehensive assessment of transboundary aquifers, the Sec-
- 14 retary shall, to the maximum extent practicable, work with
- 15 appropriate Federal agencies and other organizations to
- 16 develop partnerships with, and receive input from, relevant
- 17 organizations in Mexico to carry out the program.
- (e) Grants and Cooperative Agreements.—The
- 19 Secretary may provide grants or enter into cooperative
- 20 agreements and other agreements with the Water Re-
- 21 source Research Institutes and other Border State entities
- 22 to carry out the program.
- 23 SEC. 5. STATE AND TRIBAL ROLE.
- 24 (a) Coordination.—The Secretary shall coordinate
- 25 the activities carried out under the program with—

- 1 (1) the appropriate water resource agencies in
- 2 the Border States; and
- 3 (2) any affected Indian tribes.
- 4 (b) New Activity.—After the date of enactment of
- 5 this Act, the Secretary shall not initiate any field studies
- 6 to develop data or develop any groundwater flow models
- 7 for a priority transboundary aquifer under the program
- 8 before consulting with, and coordinating the activity with,
- 9 the Border State water resource agency that has jurisdic-
- 10 tion over the aquifer.

11 SEC. 6. AUTHORIZATION OF APPROPRIATIONS.

- 12 (a) In General.—There are authorized to be appro-
- 13 priated to carry out this Act \$50,000,000 for the period
- 14 of fiscal years 2005 through 2014.
- 15 (b) DISTRIBUTION OF FUNDS.—Of the amounts
- 16 made available under subsection (a), 50 percent shall be
- 17 made available to the Water Resource Research Institutes
- 18 to provide funding to appropriate entities in the Border
- 19 States (including Sandia National Laboratories, State
- 20 agencies, universities, the Tri-Regional Planning Group,
- 21 and other relevant organizations) and Mexico to conduct
- 22 activities under the program, including the binational col-
- 23 lection and exchange of scientific data.

1 SEC. 7. REPORTS.

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2	Not later than 5 years after the date of enactment
3	of this Act, and on completion of the program in fiscal
4	year 2014, the Secretary shall submit to the appropriate
5	water resource agency in the Border States, an interim
6	and final report, respectively, that describes—
7	(1) any activities carried out under the pro-
8	gram;
9	(2) any conclusions of the Secretary relating to
10	the status of transboundary aquifers; and
11	(3) the level of participation in the program of

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entities in Mexico.